

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-24. (Cancelled).

25. (Previously Presented) An encapsulation method for leadless semiconductor packages, the method comprising:

attaching a plurality of dice to die pads in a plurality of cavities of a lead frame, the cavities arranged in a matrix of columns and rows;

electrically connecting the dice to a plurality of conducting portions of the leadframe;

causing a molding material to flow into a first cavity;

causing said molding material to flow from said first cavity into a second cavity adjacent to and in the same column as said first cavity; and

causing said molding material to flow from said first cavity into a third cavity adjacent to and in the same row as said first cavity.

26. (Previously Presented) The encapsulation method of Claim 25, further comprising causing said molding material to flow from said first cavity into a fourth cavity adjacent to and in the same row as said first cavity.

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27. (Previously Presented) The encapsulation method of Claim 25, further comprising:
causing said molding material to flow from said second cavity into a fourth cavity adjacent to and in the same column as said first cavity; and
causing said molding material to flow from said second cavity into a fifth cavity adjacent to and in the same row as said second cavity.

28. (New) An encapsulation method comprising:
attaching a plurality of dice to die pads in a plurality of cavities of a leadframe, wherein the cavities are arranged in a matrix having a plurality of columns of cavities and a plurality of rows of cavities;
injecting a molding material along each of the plurality of columns of cavities; and causing the molding material to flow along each of the plurality of rows of cavities.

29. (New) The encapsulation method according to Claim 28, wherein causing the molding material to flow along each of the plurality of rows of cavities balances a pressure of the molding material injected along each of the plurality of columns of cavities.

30. (New) The encapsulation method according to Claim 28, wherein causing the molding material to flow along each of the plurality of rows of cavities drains bubbles induced in the molding material in the plurality of cavities.

31. (New) The encapsulation method according to Claim 28, wherein the molding material is injected into each cavity along a given column through longitudinal inter-cavity gates situated between the cavities in the given column.

32. (New) The encapsulation method according to Claim 31, wherein the molding material flows between one or more cavities in a given row through transverse inter-cavity gates situated between the cavities in the given row.

33. (New) The encapsulation method according to Claim 28, further comprising electrically connecting the dice to a plurality of conducting portions of the leadframe before injecting the molding material.

34. (New) The encapsulation method according to Claim 28, wherein the molding material flows along each of the plurality of rows of cavities in response to injecting the molding material along each of the plurality of columns of cavities.

35. (New) An encapsulation method comprising:
injecting a molding material into a first cavity, from the first cavity through a first gate into a second cavity and from the second cavity through a second gate into a third cavity,
wherein first gate and second gate are situated along a first column containing the first cavity, the second cavity and the third cavity;

injecting the molding material into a fourth cavity, from the fourth cavity through a third gate into a fifth cavity and from the fifth cavity through a fourth gate into a sixth cavity, wherein the third gate and fourth gate are situated along a second column containing the fourth cavity, the fifth cavity and the sixth cavity; and

causing the molding material to flow from the second cavity through a fifth gate into the fifth cavity, wherein the fifth gate is situated along a row containing the second cavity and fifth cavity.

36. (New) The encapsulation method according to Claim 35, wherein the molding material flows from the second cavity through the fifth gate into the fifth cavity in response to injecting the molding material along the first column and the second column.

37. (New) The encapsulation method of Claim 36, wherein causing the molding material to flow into from the second cavity through the fifth gate into the fifth cavity in response to injection the molding material along the first column and the second column is adapted to balance pressure between cavities in the first column and cavities in a second column

38. (New) The encapsulation method of Claim 36, wherein causing the molding material to flow into from the second cavity through the fifth gate into the fifth cavity in response to injection the molding material along the first column and the second column is adapted to drain bubbles induced in the molding material.

39. (New) The encapsulation method according to Claim 36, further comprising electrically connecting the dice to a plurality of conducting portions of the leadframe before injecting the molding material.

40. (New) The encapsulation method according to Claim 35, wherein the cavities are arranged on a leadframe in a matrix having a plurality of columns of cavities and a plurality of rows of cavities.